Message

From: Houda, Tara [Houda.Tara@epa.gov]
Sent: 4/14/2021 8:06:29 PM
To: Hansel, Joel [Hansel.Joel@epa.gov]
CC: Decker, Chris [Decker.Chris@epa.gov]
Subject: RE: Assessment of PP data

Oh, one tiny item, next time please include ***deliberative***

From: Houda, Tara
Sent: Wednesday, April 14, 2021 4:05 PM
To: Hansel, Joel <Hansel.Joel@epa.gov>
Subject: RE: Assessment of PP data

Thank you!

From: Hansel, Joel <Hansel.Joel@epa.gov>
Sent: Wednesday, April 14, 2021 2:23 PM
To: Polinsky, Robyn <Polinsky.Robyn@epa.gov>
Cc: Parker, William <parker.william@epa.gov>; Houda, Tara <Houda.Tara@epa.gov>; Bouma, Stacey <Bouma.Stacey@epa.gov>; Danois, Gracy R. <Danois.Gracy@epa.gov>; R4 DOCL PineyPoint <R4_DOCL_PineyPoint@epa.gov>; Decker, Chris <Decker.Chris@epa.gov>
Subject: Assessment of PP data

Robyn,

At your request as EUL for the Piney Point response, Chris Decker and I have reviewed the data submitted to us. This data included sampling results from 2019 at 4 locations, 4/5/2021 by FDEP at 2 locations, and 4/8/2021 from EPA at 2 locations. We understand that the EU was tasked with two items and you asked for a third via email:

1) Compare the 2019 data to the 2021 data.
2) Compare the 2021 data from EPA to 2021 data from FDEP from split samples
3) Assess potential outcomes (algal bloom, HABs, and fish kills) based on the 4/8/2021 data

Our analysis of the data for each point is below:

1) A comparison of the data from 2019 and 2021 shows that the water quality in the NGS-S pond in 2019 is similar to the water quality of the discharge in 2021. We conclude that similar effects in the bay are possible between these two events. Our conclusion is caveated by the fact that we are unsure of the amounts discharged and therefore total loadings may differ. Additionally, meteorological events may not be the same in these two years so duplicate effects may not be seen.
2) While a request was made for splitting samples between FDEP and EPA R4 for the sampling event on 4/8/21, we understand that a split was not done and all samples were sent to either the LSASD laboratory at Athen or the NAREL lab at Montgomery. Therefore, a comparison between samples is not possible. Should split samples become available, we will do this analysis at that time.
3) Based on the data:
    a. Nickel is elevated above the Florida water quality criteria for Class III marine waters. Because this criterion is based on chronic effects and the reported concentration is below EPA's CWA Section 304(a) acute water quality criterion guidance, we do not believe that aquatic impacts will occur due to nickel.
    b. Ammonia nitrogen is highly elevated (200 mg/L). FDEP does not have water quality criteria for ammonia in Class III marine waters, however, EPA does have a recommended CWA Section 304(a) water quality

criterion guidance value. At the approximate pH, salinity, and temperature of the site, the associated acute criteria is 4.11 mg/L and chronic criteria is 0.62 mg/L. While one would expect acute toxicity due to this concentration, ammonia is also an irritant to aquatic life and therefore, fish and other motile species will avoid the area of discharge. This seems to be confirmed by the fact that no fish kills have been reported in the area.

c. Nutrient impacts are difficult to gage at this point in time. Effects from nutrient loading to the Port Manatee system (algal blooms and HABs) are complicated by meteorological considerations including but not limited to rainfall, temperature, and light attenuation. Based on previous events, we expect an increased likelihood of algal blooms associated with this loading but cannot assess the type of bloom, areal extent or duration. We cannot determine if any resulting bloom will be a HAB as this is dependent on factors that cannot be assessed at this time. Should a significant bloom occur, a fish kill is possible when the bloom dies off and dissolved oxygen levels fall.

Item of Concern

Availability of sample analysis data remains an overarching concern. (sonde data is current).

- April 8th samples sent to LSASD for analysis is latest data available to us.
- April 7th is latest nutrient data available on the public dashboard. https://floridadep.gov/dear/dear/content/tampa-bay-sampling-response-and-results

Summary Statements

- Data are consistent between sampling events in 2019 and 2021.
- Water quality standards are being met for the vast majority of parameters sampled.
- For those that are not being met, we see no evidence of impacts at this time and do not expect impacts in the future.
- Impacts (primarily algal blooms) directly related to nutrient loads from this event are possible in the long term but cannot be accurately predicted at this time.